CIN No. : L26943RJ1979PLC001935
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SHREE CEMENT LTD.

Regd. Office:
BANGUR NAGAR, POST BOX NO.33, BEAWAR 305 901, RAJASTHAN, INDIA

SCL/BWR/ENV-9 /2018-19/ 7164

Date: 25/09/2018

To,

File No. C-105

The Member Secretary,
Rajasthan Pollution Control Board,
4, Institutional Area, Jhalana Doongri Road,
JAIPUR-302004 (Rajasthan).

Sub:- Environmental Statement of Cement Unit-1 of M/s Shree Cement Ltd, Village – Andheri Deori, Tehsil Masuda, District Ajmer (Raj) for the period of April 2017-March 2018.

Ref: - CTO No. - F(Tech)/AJMER(Beawar)/4(1)/2008-2009/6873-6875 dated – 31/10/2017

Dear Sir,

Kindly refer to above subject matter and referred letter. In this regard, we are submitting herewith the Environmental statement of Cement Unit 1.

This is for your kind information please.

Thanking you,
Yours faithfully,

For Shree Cement Ltd;

(Rakesh Bhargava)
Sr. Vice President (Environment)

Copy to:-

1. Chief Conservator of Forests (Central), Ministry of Environment & Forests, Central Regional Office, Kendriya Bhawan, 5th Floor Sector H, Aliganj, Lucknow – 226024 (U.P.)
2. The in charge (Regional office), Rajasthan state pollution control board, SPL-II, 5th phase, RIICO Ind area, Kishangarh.

O/C ENVT

ENVIRONMENTAL STATEMENT
M/s Shree Cement Limited Unit 1
Beawar, Rajasthan
Period from : April, 2016 to : March, 2017

FORM – V

PART – A

1.	Name and address of the Owner / Occupier of the Industry operation or process	M/S Shree Cement Ltd Bangur Nagar P.O. Box No. 33 Beawar- 305901 Distt. Ajmer (Rajasthan)
2.	Industry Category Primary (S.T.C. Code) Secondary (S.T.C. Code)	Red Category
3.	Production Capacity	4000 TPD Clinker 6000 TPD Cement
4.	Year of Establishment	1985
5.	Date of the last Environmental Statement submitted	25/09/2017

PART – B

WATER AND RAW MATERIAL CONSUMPTION

1. **WATER CONSUMPTION:**

Process	:	N.A. (As plant is based on dry Process technology)
Cooling and dust Suppression	:	32303 KL
Domestic	:	176081 KL (Common for Cement Plants & Power Plants)

Name of Product	Process Water Consumption per Unit of Clinker Output	
	During Previous Financial Year	During Current Financial Year
Clinker	0.115 KL/ MT of Clinker	0.075 KL/ MT of Clinker
Cement	0.097 KL/ MT of Cement	0.043 KL/ MT of Cement

2. RAW MATERIAL CONSUMPTION: (CEMENT)

Name of Raw Material	Name of Product	Consumption of Raw Material Per Unit of Output (Cement)	
		During Previous Financial Year	During Current Financial Year
1. Limestone	Cement	1.386	0.899
2. Laterite /Iron Ore		0.000	0.006
3. Slag		0.011	0.000
4. Sweetner/ High Grade Limestone/Flyash in raw mill/ sand		0.000	0.000
5. Gypsum		0.064	0.053
6. Fly Ash		0.007	0.023
7. Coal & Pet Coke		0.084	0.055
8. Bed Ash (in Cement)		0.000	0.000
9. Marble Slurry		0.000	0.000
10. AFR(Hazardous Waste)		0.000	0.000

3. POWER CONSUMPTION (KWH/T OF CEMENT):

During Previous Financial Year	During Current Financial Year
92.03	84.34

4. TOTAL CEMENT PRODUCTION (MT):

Product	During Previous Financial Year	During Current Financial Year
Clinker	558876	430538
Cement	658406	753819

PART – C
DISCHARGED TO ENVIRONMENTAL / UNIT OF OUTPUT

Pollutants	Quantity of Pollutants Discharged (Mass/Day)	Concentration of Pollutants in Discharge (Mass/Value)	Percentage of variation from prescribed standard with reasons

2. RAW MATERIAL CONSUMPTION: (CEMENT)

Name of Raw Material	Name of Product	Consumption of Raw Material Per Unit of Output (Cement)	
		During Previous Financial Year	During Current Financial Year
1. Limestone	Cement	1.386	0.899
2. Laterite /Iron Ore/Mill scale		0.000	0.006
3. Slag		0.011	0.000
4. Sweetner/ High Grade Limestone/Flyash in raw mill/ sand		0.000	0.000
5. Gypsum		0.064	0.053
6. Fly Ash		0.007	0.023
7. Coal & Pet Coke		0.084	0.055
8. Bed Ash (in Cement)		0.000	0.000
9. Marble Slurry		0.000	0.000
10. AFR(Hazardous Waste)		0.000	0.000

3. POWER CONSUMPTION (KWH/T OF CEMENT):

During Previous Financial Year	During Current Financial Year
92.03	84.34

4. TOTAL CEMENT PRODUCTION (MT):

Product	During Previous Financial Year	During Current Financial Year
Clinker	558876	430538
Cement	658406	753819

PART – C
DISCHARGED TO ENVIRONMENTAL / UNIT OF OUTPUT

Pollutants	Quantity of Pollutants Discharged (Mass/Day)	Concentration of Pollutants in Discharge (Mass/Value)	Percentage of variation from prescribed standard with reasons

(a)	Water	As the plant is being operated on dry process technology, no liquid effluent is generated from the cement plant. Domestic waste water generated from residential colony and office toilets is treated in STP and treated water is used in plantation activities. Total quality of treated domestic waste water during the year 2017-18 was 103880 KL. Residential colony is common for Shree Cement Limited Unit 1& 2, Mines and Power Plants. Analysis report of STP treated water is attached as annexure.
(b)	Air	Please refer **Annexure – 1 & 2**

PART – D

HAZARDOUS WASTE

(As specified under Hazardous Wastes (Management, Handling & Trans boundary Movement Rule, 2016)

Hazardous Waste	**Total Quantity (Ltrs.)**	
	During Previous Financial Year (2016-2017)	**During Current Financial Year (2017-2018)**
a)From Process (Cement manufacturing is based on "Dry Process" No Hazardous waste is generated from the process except used oil which is drained from Machinery / Equipments)	We have Common authorization for Hazardous Waste Management & Handling for Unit 1& 2, D.G. Sets, Power Plants, Synthetic Gypsum and Mines Total Quantity generated from April-2016 to March-2017 = 7980 Ltrs. Old Stock = 6930 Ltrs. Total Used oil = 14910 Ltrs. Sold-out to registered recycler = 14910 Ltrs. Balance Quantity= 0 Ltrs	We have Common authorization for Hazardous Waste Management & Handling for Unit 1& 2, D.G. Sets, Power Plants, Synthetic Gypsum and Mines Total Quantity generated from April-2017 to March-2018 = 8400 Ltrs. Old Stock = 0 Ltrs. Total Used oil = 8400 Ltrs. Sold-out to registered recycler = 8400 Ltrs. Balance Quantity= 0 Ltrs
(b) From Pollution Control Facilities	N.A.	N.A.

(a)	Water	As the plant is being operated on dry process technology, no liquid effluent is generated from the cement plant. Domestic waste water generated from residential colony and office toilets is treated in STP and treated water is used in plantation activities. Total quality of treated domestic waste water during the year 2017-18 was 103880 KL. Residential colony is common for Shree Cement Limited Unit 1& 2, Mines and Power Plants. Analysis report of STP treated water is attached as annexure.
(b)	Air	Please refer **Annexure – 1 & 2**

PART – D

HAZARDOUS WASTE

(As specified under Hazardous Wastes (Management, Handling & Trans boundary Movement Rule, 2016)

Hazardous Waste	**Total Quantity (Ltrs.)**	
	During Previous Financial Year (2016-2017)	**During Current Financial Year (2017-2018)**
a)From Process (Cement manufacturing is based on "Dry Process" No Hazardous waste is generated from the process except used oil which is drained from Machinery / Equipments)	We have Common authorization for Hazardous Waste Management & Handling for Unit 1& 2, D.G. Sets, Power Plants, Synthetic Gypsum and Mines Total Quantity generated from April-2016 to March-2017 = 7980 Ltrs. Old Stock = 6930 Ltrs. Total Used oil = 14910 Ltrs. Sold-out to registered recycler = 14910 Ltrs. Balance Quantity= 0 Ltrs	We have Common authorization for Hazardous Waste Management & Handling for Unit 1& 2, D.G. Sets, Power Plants, Synthetic Gypsum and Mines Total Quantity generated from April-2017 to March-2018 = 8400 Ltrs. Old Stock = 0 Ltrs. Total Used oil = 8400 Ltrs. Sold-out to registered recycler = 8400 Ltrs. Balance Quantity= 0 Ltrs
(b) From Pollution Control Facilities	N.A.	N.A.

PART – E

SOLID WASTE

		Total Quantity	
		During Previous Financial Year (2016-2017)	**During Current Financial Year (2017-2018)**
(a)	From Process	Nil	Nil
(b)	From Pollution Control Facility	Dust collected in the ESPs, Bag Houses and Bag Filters are recycled to the system.	
(c)	1. Quantity rejected or re-utilized within the unit	100%	100%
	2. Sold	Nil	Nil
	3. Disposed	Nil	Nil

PART – F

Please specify the characterization (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both the categories of wastes:

Battery Wastes:

As specified under Batteries (Management and Handling) Amendment Rules, 2010, we have purchased following new batteries of different categories is common for cement plant, power plant and mines -

1.	Number of new batteries of different categories purchased from the manufacturer / importer / dealer or any other agency	During 1st Apr 2017 to 31st Mar 2018	
	Common for Unit 1 & 2, Power plants, D.G.Sets, Synthetic Gypsum plant & Mines		
	Category:	(i) No. of Batteries	(ii) Approximate Weight (In Metric Tonnes)
	(i) Automotive		
	a) Four wheeler	40	1.328
	b) Two wheeler	Nil	Nil
	(ii) Industrial		
	a) UPS	Nil	Nil

	b) Motive Power	Nil	Nil
	c) Stand –by	Nil	Nil
	(iii) Others	Nil	Nil
	Total	40 **Nos**	1.328 **MT**
	Number of used batteries of categories mentioned in Sl. No 3 and Tonnage of scrap sent manufacturer/dealer/importer/registered recycler/or any other agency to whom the used batteries scrap was sent	During 1st Apr 2017 to 31st Mar 2018	
	Common for Unit 1 & 2, Power plants, D.G.Sets, Synthetic Gypsum plant & Mines		
2.	Category:	(i) No. of Batteries	(ii) Approximate Weight (In Metric Tonnes)
	(i) Automotive		
	a) Four wheeler	36	2.59
	b) Two wheeler	12	0.05
	(ii) Industrial	Nil	Nil
	a) UPS	10	0.6
	b) Motive Power	Nil	Nil
	c) Stand –by	Nil	Nil
	(iii) Others	Nil	Nil
	Total	**58 Nos.**	**3.24 MT**

Used battery scrap was sent to CPCB authorized recycler

Hazardous Wastes

Cement manufacturing is based on "Dry Process". No Hazardous waste is generated from the process except used oil which is drained from Machineries / Equipments. The used oil & Lead acid batteries are sold to CPCB authorized recyclers.

Bio-Medical Wastes:

Bio-medical waste generated is common for cement plant, power plant and mines during current financial year April 2017 to March 2018 under the Bio-Medical Waste (Management & Handling) Rules 2016, are as follows.

	Bio-Medical Waste Quantity (Kg) as per Colour Coding			
	Yellow	**Red**	**Blue**	**White**
April 2017 to March 2018	262	212	241	0

Above mentioned waste has been sent to Sales Promoter, CBWTF Bio Medical Treatment Facility, Jaipur Bye Pass Road, Ajmer (Raj.) for disposal.

E- Wastes:

	Total Quantity	
	During Previous Financial Year (2016-2017)	During Current Financial Year (2017-2018)
From Process	Nil	Nil
From Pollution Control Facility	Nil	Nil
Others	11.71	0.055

Solid Wastes: - N.A.

PART – G

IMPACT OF THE POLLUTION CONTROL MEASURES ON CONSERVATION OF NATURAL RESOURCES AND CONSEQUENTLY ON THE COST OF PRODUCTION

M/s Shree Cement Limited is being operated on dry process technology, which is cost effective and environmentally clean technology. The advantage of dry process is also in fuel economy. The stack emissions from the plant are controlled by equipment like ESPs & Bag Houses. Bag Filters installed at various material transfer points to clean the process and arrest the fugitive emissions. The particulate matter collected in the pollution control equipment is recycled in process and neutralizing the cost of operation of pollution control equipment and hence no cost impact on the production cost.

To emphasis on conservation of the natural resources & to reduce the disposal problems of the waste, total 130.793 MT hazardous waste was co-processed and 4729.403 MT hazardous waste was utilized during April 17- March 18.

PART – H

ADDITIONAL MEASURES / INVESTMENTS PROPOSAL FOR ENVIRONMENT PROTECTION INCLUDING ABATEMENT OF POLLUTION

Green belt development and tree plantation is our ongoing process. In the year 17-18, 2056 new trees have been planted. Up to March 2018 total green area is around 82.83 hectare with around 226707 nos. of trees which is ~35 % of the total land of plant and colony area (231.94 Ha.).

PART – I

ANY OTHER PARTICULATES FOR IMPROVING THE QUALITY OF ENVIRONMENT.

1. We have full-fledged Environment Department with three separate cells, for monitoring, maintenance of pollution control equipment and Green Belt development.
2. Monitoring of stack emission and ambient air and water quality is being done regularly.
3. Maintenance department is doing regular checking and scheduled maintenance of all the pollution control devices.
4. Civil dept. taking care of Housekeeping and water supply department is taking care of operation of STP.
5. Horticulture Department is taking care of tree plantation and green belt development. Every year we are doing tree plantation.
6. Conversion of ESP to Bag House has being done in Raw Mill and Kiln stack.

We are enclosing herewith following documents:-

Annexure-1 : Stack Emission monitoring report.

Annexure-2 : Ambient Air Quality (PM10, PM2.5, SO_2 and NO_2), Ambient Noise Level monitoring report.

Annexure-3 : Treated Domestic Wastewater analysis report.

Annexure: 1

Shree Cement Ltd, Beawar
Unit-I
Stack Emission monitoring Report (PM All values in mg/Nm^3)
Year: 2017-18

S. No.	Month	Raw Mill & Kiln Stack	Coal Mill Stack	Cooler Stack	Cement Mill Stack
1	Apr-17	10	13	14	16
2	May-17	10	11	6	21
3	Jun-17	9	22	25	19
4	Jul-17	6	9	22	17
5	Aug-17	-	-	-	24
6	Sep-17	-	-	-	9
7	Oct-17	-	-	-	10
8	Nov-17	-	-	-	6
9	Dec-17	-	-	-	23
10	Jan-18	-	-	-	13
11	Feb-18	12	9	7	11
12	Mar-18	14	9	14	16
Average		10	12	15	15

Annexure: 2

Shree Cement Ltd, Beawar

Ambient Air Quality (µg/M^3)& Noise Level Monitoring Report For The Period Of April 2017 To Mar 2018

Common for Cement plant & Power plant

Year:-2017-2018

Location →	Plant boundary towards						Residential Colony						Plant boundary towards						Main Gate					
	AAQ in µg/M^3				Noise Level in dB(A)		AAQ in µg/M^3				Noise Level in dB(A)		AAQ in µg/M^3				Noise Level in dB(A)		AAQ in µg/M^3				Noise Level in dB(A)	
Parameter →	PM 2.5	PM-10	SO_2	NO_2	Day time	Night time	PM 2.5	PM 10	SO_2	NO_2	Day time	Night time	PM 2.5	PM 10	SO_2	NO_2	Day time	Night time	PM 2.5	PM 10	SO_2	NO_2	Day time	Night time
Apr	28	50	8	9	67.1	46.7	25	47	8	8	59.9	45.8	30	53	10	10	64.8	53.4	26	47	9	9	65.4	49.7
May	29	52	9	6	66.1	47.5	28	51	6	5	65.2	58.2	23	47	8	8	72.4	56.4	27	49	10	11	67.1	56.1
Jun	27	51	10	7	72.1	46.2	24	44	8	8	65.8	55.8	28	50	9	10	70.4	59.8	28	51	11	9	69.9	52.4
Jul	28	50	9	6	71.2	49.2	25	48	9	9	67.1	46.6	27	52	7	10	69.8	50.2	27	50	10	10	66.8	50.2
Aug	28	52	10	11	70.5	45.9	27	50	10	10	66.5	50.2	29	52	9	12	71.6	58.6	29	51	9	8	71.2	51.9
Sep	29	51	8	9	71.2	46.3	28	50	9	9	67.2	51.2	32	58	10	10	70.1	59.8	27	49	8	8	72.2	52.4
Oct	30	49	9	10	68.1	42.5	27	51	8	8	63.1	47.9	28	48	11	11	65.4	54.2	29	50	9	9	70.2	51.4
Nov	30	50	9	9	66.4	44.2	27	52	9	8	67.2	45.7	30	50	10	10	62.7	53.4	30	51	10	9	69.4	52.4
Dec	30	49	9	9	65.4	46.8	27	51	9	8	60.2	48.5	29	49	10	10	68.9	55.9	29	51	10	9	69.4	49.5
Jan	30	50	10	10	65.8	44.5	28	52	9	9	66.8	45.5	30	51	11	10	62.4	53.8	29	54	10	10	68.7	51.8
Feb	29	51	10	10	66.1	44.9	30	50	8	9	65.4	46.2	27	52	10	8	62.1	54.2	32	55	10	9	67.5	52.1
Mar	31	55	10	10	64.6	48.6	28	52	9	9	65.2	48.5	32	57	10	9	62.7	55.3	28	55	10	9	68.5	53.5
Average	**27**	**51**	**9**	**9**			**25**	**48**	**8**	**8**			**26**	**52**	**9**	**9**			**27**	**51**	**9**	**8**		

Annexure: 3

(STP Treated Water Quality, Year 2017-2018)													
S. No.	Parameter ↓	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Avg
1	pH	7.12	7.17	7.14	7.56	7.62	7.47	7.31	7.28	7.21	7.33	7.39	7.13	7.22
2	Suspended Solids	86	78	70	52	58	62	58	62	72	80	90	82	76.75
3	COD	74.6	74.6	76.8	52	54	56	56	58	56	48	52	74.4	82.37
4	BOD 3days 27°C	18.4	18.6	18.2	12.2	12.4	12.6	12.4	12.6	12.8	12.2	13.2	19.2	15.75
5	Oil and Grease	1.03	1.01	1.52	0.4	0.44	0.48	0.42	0.38	0.42	0.58	0.47	1.07	1.05